ATTACHMENT I

Answers to

Request for Additional Information

50-286 779730045 8/9/11

Indian Point 3 Nuclear Power Plant
 Docket No. 50-286
 August 4, 1977

Quality Assurance

Question 421.1 (17.2.2)

Correct the last sentence in subsection 17.2.2.2 to indicate that the safety-related structures, systems, and components controlled by the QA program are identified in Appendix A of Consolidated Edison's QA Program description dated June 9, 1977 which is contained in Docket File No. 50-286 for the Indian Point Unit No. 3 facility. Alternatively provide your own corrected list.

Response

The safety related structures, systems, and components controlled by the QA Program are identified in Table 17.2.2-3 (attached).

Question 421.2 (17.2.3)

Describe those provisions for assuring that when a test program is used to verify the adequacy of a design, a qualification test of a prototype unit under adverse design conditions will be performed.

Response

The qualification test of a prototype unit under adverse design conditions would not be practical or realistic when verifying the adequacy of a design change or modification to an existing system of an operating plant. Design changes will constitute the majority of engineering work when an operating plant is involved. In such cases the Authority will depend on an independent review to assure the necessary adequacy verification.

TABLE 17.2.2-3

SAFETY-RELATED STRUCTURES, SYSTEMS AND COMPONENTS

CONTROLLED BY THE QA PROGRAM

- 1. Core and Reactor Internals
- 2. Control Rods and Drives
- 3. Reactor Coolant System (Includes Pressurizer System and associated safety and relief valves)
- 4. Secondary Coolant System Up to Second Isolation Valve (Includes Secondary Relief, Auxiliary Feedwater and Boiler Blowdown)
- 5. Chemical and Volume Control System
- 6. Sampling System
- 7. Containment
- 8. Containment Isolation System
- 9. Containment Ventilation
- 10. Containment Spray System
- 11. Containment Air Recirculation Cooling and Filtration System
- 12. Waste Disposal System
- 13. Service Water-Essential Header
- 14. Instrument Air
- 15. Fuel Handling System
- 16. Reactor Protection System
- 17. Engineered Safety Systems Protective System
- 18. Regulating Systems
- 19. Functional and Area Radiation Monitoring System
- 20. Emergency Power System
- 21. Containment Penetration and Weld Channel Pressurization System
- 22. Isolation Valve Seal Water System
- 23. Hydrogen Recombiner System
- 24. Safety Injection System
- 25. Component Cooling System
- 26. Residual Heat Removal System
- 27. Spent Fuel Cooling System
- 28. All items designated in Design Specification as ASME Section III, Classes 1, 2 and 3.
- 29. Diesel Generator Fuel Oil
- 30. Boric Acid
- 31. Lubricating Oils Whose Loss Could Degrade Critical Components
- 32. Demineralizer Resins for CVCS
- 33. Sodium Hydroxide For Use In The Containment Spray System
- 34. Weld Rod for class safety related items
- 35. Hydraulic Snubber Fluid

- Clarify that inspection procedures, instructions, and checklists provide for the following:
- (a) Identification of characteristics and activities to be inspected.
- (b) Identification of the individuals or groups responsible for performing the inspection operation.
- (c) A description of the method of inspection.
- (d) Recording evidence of completing and verifying a manufacturing, inspection, or test operation.
- (e) Recording the inspector or data recorder and the results of the inspection operation.

Response

- a. The Quality Assurance Program shall provide for inspection during manufacturing, receiving, storage, handling, installation, testing, operations, repairs, maintenance and modifications, as applicable. Inspection requirements shall be translated into written procedure instructions and/or checklists. These documents shall govern the conduct and the degree of inspection activity to ensure that the required quality is obtained and objective evidence of the inspections is available.
- b. Individuals or groups who have been designated to perform inspections shall be qualified in accordance with appropriate criteria. Routine in-process inspections required during maintenance and operations shall be performed by qualified personnel of the plant staff or delegated organizations. Specific elements of work requiring quality acceptance shall be identified by the QA staff who shall perform the inspection and witness testing either at the plant or vendor facilities.

- c. When notification or hold points have been established the process control procedure shall include provisions to ensure that work does not progress beyond these points until released by the designated authority. The method of inspection used shall be consistent with the complexity and nature of the work performed, i.e., NDE, Visual, etc.
- d/e. Inspection operations, including monitoring, witnessing and/ or auditing shall be documented and validated by inspection stamps and/or inspectors sign-off.

<u>Question</u> 421.4 (17.2.12)

Describe those provisions which assure that the status of items under the calibration system is recorded and maintained.

Response

Administrative Procedure, "Calibration of Measuring and Test Equipment" will be in effect when PASNY assumes operation of IP3NPP. This procedure applies to Measuring and Test Instructions for tools used in checking, repairing, maintaining, modifying or installing Category I systems or components and those permanent plant instruments whose calibration is a pre-requisite of system surveillance and testing is required by technical specifications.

Conduct of Operations

Question 422.1 (13.1.1.1)

You describe in Section 13.1.1.1.2 (Technical Support) that one of your means of providing technical support to the plant staff is to "utilize the original plant designer and NSSS vendor as required". In regard to this type of "contracted" support, describe the extent to which it will be used and the current state of its availability.

Response

The Authority has entered into an agreement with United Engineers & Constructors Inc. (UE&C) to provide technical support services for Indian Point 3 Nuclear Power Plant. UE&C had designed and partially managed construction of the plant under an agreement with Westinghouse Electrical Corporation.

UE&C will be available under contractual conditions, on an as needed basis, to provide engineering, design, estimating, cost control, scheduling, purchasing, coordination, inspection, expediting, quality assurance, quality control and construction management services to the extent necessary to fully complement the Authority's in-house staff.

Contractual agreements are presently being pursued with Westinghouse Electrical Corporation for providing NSSS engineering services for the IP3 Nuclear Power Plant, under similar terms.

Question 422.2 (13.1.2.1)

Describe your minimum qualification requirements for the positions of Superintendent of Power, Site Quality Assurance Engineer, and Training Coordinator shown in Figure 13.1.2.1-1.

Response

The Superintendent of Power shall have the same requirements as those detailed for Plant Managers in ANSI-18.1-1971. This consists of ten(10) years of responsible power plant experience of which a minimum of three (3) years shall be nuclear power plant experience.

The Training Coordinator shall have a minimum of a high school diploma or equivalent and four (4) years of responsible power plant experience of which a minimum of one year shall be nuclear power plant experience. Maximum of two (2) years of the remaining three years of power plant experience may be fulfilled by academic or related technical training on a one-for-one time basis.

The site QA Engineer qualification requirements are fully described in Table 17.2.2-1 of Chapter 17, Quality Assurance - Operations Phase.

422.3 (13.1.2.2)

Describe which plant staff position has responsibility for plant chemistry and radiochemistry.

Response

The Radiological and Environmental Services Superintendent shall have the responsibility for the plant chemistry and radiochemistry. This responsibility will be implemented by the Chemistry Supervisor reporting directly to the Radiological and Environmental Services Superintendent.

422.4 (13.1.2.2)

Expand Figure 13.1.2.1-1 to show, or describe the number of persons you plan to assign to each of the functional groups shown in that figure.

Response

The following list shows the number of persons that are anticipated to be assigned to each functional group in the Plant Staff Organization:

Maintenance	35
Instrumentation and Control	18
Operations	31
Radiation and Environmental Services	15
Technical Services	12
Training	1.
Quality Assurance	7
Office Staff	9
Security and Safety	1

Question 422.5 (13.1.3.1)

Provide personnel resumes of the persons filling the positions of Maintenance Superintendent, I&C Superintendent, Shift Supervisor and Site Quality Assurance Engineer.

Response

The resumes of the persons filling the positions of Shift Supervisor (Messrs. R. Allen, J. Holdam, C. Mackay, H. Mackay, J. Russell and R. Sporbert) are appended to this attachment. The resumes of the persons filling the positions of Maintenance Superintendent (Mr. R. Haggarty) and Site Quality Assurance Engineer (Mr. D. Halama) are also provided.

The position of I&C Superintendent has not been filled at this time. When the position is filled, a personnel resume will be forwarded for your review.

A revised resume for the Resident Manager (Mr. J. P. Bayne) is also included.

422.6 (RSP) (13.1.2.2)

It is our position that the person filling the position of Operations Superintendent on the plant staff be a Senior Licensed Operator (see Section 4.2.2 of ANSI N18. 1-1971). Please state your intent to conform to this position.

Response

It is the intent of the Power Authority that the Operations Superintendent shall hold a Senior Reactor Operator License in conformance with ANSI 18.1-1971 Section 4.2.2. If the Superintendent of Power holds a Senior Reactor Operator (SRO) License his license will meet the requirements of ANSI 18.1-1971 until a newly appointed Operations Superintendent obtains a SRO License.

422.7

(6.5.2)

Delineate the titles of members of your Safety Review Committee or describe minimum qualification requirements for members of the committee in terms of educational requirements and experience.

Response

The following lists the SRC disciplines and Authority personnel who are voting members of the Committee and the discipline for which they are responsible:

VOTING MEMBERS

- 1. Nuclear Power Plant Operations
 - Manager-Nuclear Operations
- 2. Nuclear Engineering
 - Principal Nuclear Engineer (Staff)
- 3. Chemistry and Radio-Chemistry Radiological Safety
 - Radiological Engineer
- 4. Metallurgy

Mechanical Engineering

- Principal Nuclear Engineer Projects
- 5. Non-destructive Examination Administrative Controls and Quality Assurance Practices - Director-Quality Assurance
- 6. Instrumentation & Control Electrical Engineering
 - Principal Electrical Engineer (Staff)
- 7. Environment
- Director of Environmental Programs

NON VOTING MEMBERS

- Resident Manager (FitzPatrick)
- Resident Manager (Indian Point 3)
- Attorney
- Project Engineer (FitzPatrick)
- Project Engineer (Indian Point 3)
- Project Engineer (Greene County)
- Secretary, SRC

ROBERT T. ALLEN SHIFT SUPERVISOR

INDIAN POINT 3 NUCLEAR POWER PLANT POWER AUTHORITY OF THE STATE OF NEW YORK

EDUCATION:

Eastchester High School, Eastchester, New York Springfield College, Springfield, Massachusetts

EXPERIENCE:

1977 to date

POWER AUTHORITY OF THE STATE OF NEW YORK Shift Supervisor

The Shift Supervisor is in charge of the unit and operating personnel during his working hours. He is responsible for assuring all operations are conducted in accordance with approved procedures, rules and regulations, and limitations set forth in the unit's technical specifications. He is directly responsible for the safe operation of the facility, unit, and is implementor of contingency plans if required. He remains in charge in a contingency situation until properly reviewed by the appropriate personnel in the contingency organization. The shift supervisor holds a Senior Operator's License for Unit # 3 Indian Point Facility.

1965 to 1977

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

March 1965 to August 1967 - Hell Gate Station, Turbine Room and Pump Room Operator.

August 1967 to May 1971 - Hell Gate Station, Electrician - electrical trouble shooting and high and low voltage switching. Attended Con Ed electrical school October 1967 to November 1967.

June 1970 to June 1971 - Attended Con Edison Stationary Engineer's School. Obtained Stationary Engineers License October 1971.

May 1971 to May 1972, Indian Point Station, 15" elevation and water factory operator.

May 1972 to March 1974, Indian Point Station, Formal training for Senior Reactor Operator License.

March 1974 to 1977, Formal training for Senior Reactor Operator's License on Unit No. 3 and participated in the startup testing program for the unit.

JAMES V. HOLDAM III SHIFT SUPERVISOR

POWER AUTHORITY OF THE STATE OF NEW YORK

EDUCATION:

Woodrow Wilson High School

EXPERIENCE:

1977 to date

POWER AUTHORITY OF THE STATE OF NEW YORK Shift Supervisor

The Shift Supervisor is in charge of the unit and operating personnel during his working hours. He is responsible for assuring all operatings are conducted in accordance with approved procedures, rules and regulations, and limitations set forth in the unit's technical specifications. He is directly responsible for the safe operation of the facility, unit, and is implementor of contingency plans if required. He remains in charge in a contingency situation until properly relieved by the appropriate personnel in the contingency organization. The shift supervisor holds a Senior Reactor Operator's License for Unit # 3 Indian Point Facility.

1974 to 1977

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

Formal training for a Senior Reactor Operator's License on Indian Point Unit No. 3 facility and participating in the startup testing program of the unit.

1972 to 1974

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

Formal training for Senior Reactor Operator License. During this time gained specific expertise through 3094 hours of instruction and self study in those areas of knowledge required by paragraphs 55.21, 55.22, 55.23 of the Atomic Energy Commission's regulations for the Indian Point Unit No. 2 Nuclear Facility.

1963 to 1972

UNITED STATES NAVY

June 1963 to February 1966, U.S. Navy schools including Electronic Technician "A" School, Basic Nuclear Power School, Nuclear Reactor Prototype Training School, Basic Submarine School, Graduated from all above in top half of respective schools.

March 1966 to August 1966, aboard USS Orion AS-18, in charge of Radar Repair for a fleet of submarines. As such, I directly supervised a crew of 5 to 10 electronics technicians in the performance of submarine radar repair.

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August 1966 to December 1968, aboard USS Lewis and Clark Nuclear Fleet Ballistic Missile Submarine I served as a qualified Reactor Operator, Reactor Technician, and Reactor Shutdown Watchstander. As Reactor Operator, my responsibilities included direct supervision and operation of the Nuclear Reactor and its instrumentation, control and protection supporting systems. As Reactor Technician, my responsibilities included direct supervision and performance of all testing programs and maintenance requirements of the Nuclear Reactors instrumentation, control and protection systems. As Reactor Shutdown Watchstander my responsibilities included, for a shutdown Reactor and shutdown steam generating plant, direct supervision and operation of the entire engineering plant and all ship electrical systems and control.

January 1969 to May 1972, At DIG, NPTU, West Milton, New York served as Staff Instructor/Operator. While a Staff Instructor/ Operator at DIG, I qualified as Engineering Officer of the Watch, Reactor Operator, Reactor Technician and Reactor Shutdown Watchstander. As Engineering Officer of the Watch I was directly responsible to the Plant Engineer of the Prototype, for the entire Engineering Plant Operations, and for directly supervising the Reactor Operators, Reactor Technicians, all mechanical operators, and the Electrical Operators performance of their respective duties. As Staff Instructor/Operator with listed qualifications, I supervised and instituted training programs for Officers in Engineering Officer of Watch Training, and enlisted men in their various qualifications. In my capacity while Staff Instructor/ Operator at DiG, I served as Leading Reactor Operator for a watch shift section and as such as directly responsible to the Plant Engineer in the planning, instituting, and performance of all Reactor and instrumentation, maintenance and testing programs, and of directly supervising the four qualified Reactor Operator qualified Staff Instructor/Operators who worked for me.

CHARLES J. MACKAY SHIFT SUPERVISOR

INDIAN POINT 3 NUCLEAR POWER PLANT POWER AUTHORITY OF THE STATE OF NEW YORK

EDUCATION:

Cardinal Hayes High School
Westchster Community College
United States Navy, Machinest Mate Class "A" School
International Business Machines Customer Engineer School
Delahanty Institute
Turners Refrigeration School

EXPERIENCE:

1976 to date

POWER AUTHORITY OF THE STATE OF NEW YORK Shift Supervisor

The Shift Supervisor is in charge of the unit and operating personnel during his working hours. He is responsible for assuring all operations are conducted in accordance with approved procedures, rules and regulations, and limitations set forth in the unit's technical specifications. He is directly responsible for the safe operation of the facility, unit, and is implementor of the contingency plans if required. He remains in charge in a contingency situation until properly relieved by the appropriate personnel in the contingency organization. The shift supervisor holds a Senior Reactor Operator's License for Unit # 3 Indian Point Facility.

1958 to 1976

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

December 1958 to March 1961 - Hell Gate Generating Station, Qualified in Turbine and Pump rooms as Auxiliary Operator.

March 1961 to November 1961 - Astoria Generating Station, Qualified as Production Operator "B" on startup of No. 5 Unit, Allis Chalmers 385 MW Generator, Combustion Engineering Co. Boiler - 2.4M lb. steam flow.

November 1961 to March 1971- Ravenswood Generating Station, Attended startup training for No. 1 and No. 2 Units. G.E. 400 MW turbines, Combustion Engineering 2.7 M lb. boilers.

March 1971 to May 1971 - 74th Street Generating Station, Qualified as Watch Foreman on Westinghouse Unit No. 9 and 10 and Combustion Engineering Boilers 121, 122 and 123. Operatored control board on No. 123 boiler. Hagen pneumatic controls.

May 1971 to April 1972 - Ravenswood Generating Station, Startup of No. 3 Unit following outage due to stator fault. April 1972 to April 1974 - Indian Point Generating Stations, Formal training for Senior Ractor Operator License. During this time, gained specific expertise through 3113 hours of formal training and self study in those areas of knowledge required by paragraphs 55.21, 55.22 and 55.23 of the Atomic Energy Commission's regulations for the Indian Point Unit No. 2 Nuclear Facility.

April 1974 to 1976 - Attended a comprehensive Unit No. 3 difference course. During this period of time I have worked on Unit No. 3 as watch foreman during RCS cold hydro and during hot functional testing. Supervised the performance and acceptance tests of various sytsems on Unit No. 3. Performed various flushes and hydros on Unit No. 3.

1957 to 1958 INTERNATIONAL BUSINESS MACHINES

Customer typewriter repair.

1954 to 1957 UNITED STATES NAVY

Operation of 600 lb., 850°F engines and auxiliaries on destroyers. C.O.'s letter of commendation for safe and efficient operation, May 31, 1957. Honorable Discharge.

HENRY V. MACKAY SHIFT SUPERVISOR

NOTION POINT 3 NUCLEAR POWER PLANT POWER AUTHORITY OF THE STATE OF NEW YORK

EDUCATION:

Christopher Columbus High School
Con Edison Training Course for New York City Stationary
Engineer
Turners School, Training Course for New York City
Refrigeration Systems Operators License
Con Edison Training Program, Senior Reactor
Operator's License on Indian Point Unit 2.
Westchester Community College

EXPERIENCE:

1976 to date

POWER AUTHORITY OF THE STATE OF NEW YORK SHIFT SUPERVISOR

The Shift Supervisor is in charge of the unit and operating personnel during his working hours. He is responsible for assuring all operations are conducted in accordance with approved procedures, rules and regulations, and limitations set forth in the unit's technical specifications. He is directly responsible for the safe operation of the facility, unit, and is implementor of contingency plans if required. He remains in charge in a contingency situation until properly relieved by the appropriate personnel in the contingency organization. The shift supervisor holds a Scnior Reactor Operator's License for Unit #3 Indian Point . Facility.

1971 to 1976

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

Operating Mechanic A, Elevation Operator, trained on and operated the controls and machinery of the Water Treatment Plant and 15' Conventional Plant.

May 1972 to March 1974, formal training for Senior Reactor Operators License. During this time gained specific expertise through 3200 hours of instruction and self study in those areas of knowledge required by paragraphs 55.21, 55.22, and 55.23 of the Atomic Energy Commission's regulations for the Indian Point Unit No. 2 Nuclear Facility.

March 1974 to 1977, formal training for Senior Reactor Operators License on Unit 3. During this time gained specific expertise through instruction, self study and startup testing as Test Supervisor, Control Room Operator and Shift Watch Foreman on Indian Point Unit 3 Facility. 1965 to 1971

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

Astoria Generating Station Operating Mechanic A, Elevation Operator trained on and operated all five 200 psi boilers, and 380 MW turbine gnerators and thier auxiliary machinery and in field local controls. November 1970 obtained New York City Stationary Engineers License, July 1971 obtained New York City Refrigeration Systems Operators License.

1962 to 1964

UNITED STATES NAVY

Boilerman aboard USS Vigil, Honorable Discharge.

JOSEPH E. RUSSELL SHIFT SUPERVISOR INDIAN POINT 3 NUCLEAR POWER PLANT POWER AUTHORITY OF THE STATE OF NEW YORK

EDUCATION:

Owensboro Catholic High School, Owensboro, Kentucky U.S.N. Machinist Mate Class, "A" Class, Great Lakes, Illinois U.S.N. Nuclear Power School, Vallejo, California U.S.N. Nuclear Power Training Unit (AlW), Idaho Falls, Idaho U.S.N. Nuclear Welding School, San Diego, California Consolidated Edison Company of New York Inc, Senior Reactor Operator's License Program, Indian Point Unit No. 2. Buchanan, New York.
Westchester Community College, School of Industrial Management, Valhalla, New York

EXPERIENCE:

1976 to date

POWER AUTHORITY OF THE STATE OF NEW YORK Shift Supervisor

The Shift Supervisor is in charge of the unit and operating personnel during his working hours. He is responsible for assuring all operations are conducted in accordance with approved procedures, rules and regulations, and limitations set forth in the unit's technical specifications. He is directly responsible for the safe operation of the facility, unit, and is implementor of the contingency plans if required. He remains in charge in a contingency situation until properly relieved by the appropriate personnel in the contingency organization. The shift supervisor holds a Senior Reactor Operator's License for Unit # 3 Indian Point facility

1974 to 1976

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

Training for a Senior Reactor Operator's License of Indian Point Unit No. 3 facility by participation in a formal training program, the Unit No. 3 Difference Course, and by participation in Unit No. 3 Startup Testing Program acting as Con Edison's representative in the capacity of Watch Foreman.

1972 to 1974.

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

Formal Reactor Operators training program at Con Edison Indian Point Facility. During this time gained specific expertise through self study and 3160 hours of instruction in those areas of knowledge required by paragraphs 55.21, 55.22, and 55.23 of the Atomic Energy Commission's regulations for the Indian Point Unit No. 2 nuclear facility.

1971 to 1972

NORTHEAST UTILITIES, MILSTONE POINT COMPANY

Actively engaged in "On The Job Training" on General Electric Boiling Water Nuclear Power Plant. Stood routine watch and various other training watches. Received some formal training on plant operations and radiation health physics.

1964 to 1971

UNITED STATES NAVY

Assigned to Polaris submarine USS Will Rogers (SSBN659) as the leading First Class Petty Officer in the machinery division. Qualified on all watchstations including Engineering Watch Supervisor/Engineering Duty Chief Petty Officer, the senior enlisted supervisory watch stations on a naval nuclear propulsion plant, underway and in port. Duties as Engineering Watch Supervisor/Engineering Duty Chief Petty Officer included responsibility of supervising and/or performing all required evolutions including mechancial, electrical and Reactor Control Systems. Also assigned the additional responsibility of Primary Systems Petty Officer, supervising and conducting repairs and maintenance of primary reactor associated system, valves and primary plant shielding. Honorable Discharge, August 28, 1971.

RICHARD H. SPORBERT SHIFT SUPERVISOR

INDIAN POINT 3 NUCLEAR POWER PLANT POWER AUTHORITY OF THE STATE OF NEW YORK

EDUCATION:

Bullard Haven Technical High School,
Basic Machinist's Mate School
Basic Submarine School, Diesel Engine School
Basic Nuclear Power School
Completed High School Level General Education Development Test
Western New England State College
University of Connecticut, Hartford Branch
Westchester Community College

EXPERIENCE:

1976 to date

POWER AUTHORITY OF THE STATE OF NEW YORK Shift Supervisor

The Shift Supervisor is in charge of the unit and operating personnel during his working hours. He is responsible for assuring all operations are conducted in accordance with approved procedures, rules and regulations, and limitations, set forth in the unit's technical specifications. He is directly responsible for the safe operation of the facility, unit, and is implementor of contingency plans if required. He remains in charge in a contingency situation until properly relieved by the appropriate personnel in the contingency organization. The shift supervisor holds a Senior Reactor Operator's License for the Unit # 3 Indian Point Facility.

1972 to 1976

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

July 1972 to March 1974, Indian Point Station, formal training for Senior Reactor Operator's License. During this time gained specific expertise through 3036 hours of instructions and self study in those areas of knowledge required by paragraphs 55.21, 55.22, and 55.23 of the Atomic Energy Commission's regulations for Indian Point Unit No. 2 Nuclear Facility.

March 1974 to 1977, Indian Point Station, formal training for Senior Ractor Operator's License on Unit No. 3 and participated in startup testing program for the unit. 1953 to 1972

UNITED STATES NAVY

July 1954 to February 1956 - USS Witek DDE 848 maintained and operated: propulsion steam turbines and auxiliary steam driver components; diesel generators; refrigeration plants; high pressure air compressors; low pressure hydraulic plants; double effect solo shell distilling plants as well as small auxiliaries assoiciated with the above equipment. Qualification: Messenger of the watch (wiper), Engine Room and Boiler Room. Ultimately qualifying (approximtely one year) as underway and maneuvering pump man (responsible for the operation of all auxiliary pumps in the Engine Room) and Import Top Watch (responsible for the operation of all auxiliary and main propulsion equipment associated with the turbine generator and electrical distribution). Maintained rate as Machinist Mate Third class.

May 1956 to June 1957 - USS Piper SS 409 - Maintained and operatedL propulsion diesel generators; high pressure air systems; air conditioning and refrigeration plants as well as auxiliary systems associated with the propulusion and ballest controls of the "Fleet Submarine". Qualified SS (Submarine Service). Maintained rate as Machinist Mate Second Class (SS).

March 1958 to July 1959 - USS Skipjack SS (N) 585 - Maintained and operated: high pressure air system; high pressure hydraulic systems; atmosphere control systems as well as auxiliary systems assoicated with the propulsion and ballest control of a "Nuclear Attack Submarine". Qualification: Roving auxiliary Watch (responsible for the operation of the above equipment). Maintained rate as a Machinist Mate First Class (SS).

January 1960 to August 1962, United States Nuclear Propulsion Training Unit, S3G, West Milton, New York. Completed prototype training, certification from naval reactors division of AEC as Nuclear Reactor Plant Operator and Engine Room Watch Supervisor. Completed two years as a prototype instructor concentrating primarily on the operation of mechanical components in the primary and secondary plant. These responsibilities required me to actively participate in the removal and replacement of the Reactor Coolant Pumps and refueling of the Reactor.

October 1962 to May 1969 - USS Robert E. Lee SSB (N) 601 (Gold), qualified on all mechanical watch stations in the engineering plant and also received a well rounded training program in electrical and electronic systems. Utlimately qualified as Engineering Watch Supervisor. The Engineering Watch Supervisor (EWS) is certified to manipulate the reactor controls. Leading Master Chief Petty Officer Machinery Division during a ship yard overhaul included refueling, chemical cleaning of the reactor and complete refurbishment of the secondary plant on USS Robert E. Lee. Certified, by the Commanding Officer USS Robert E. Lee (Gold), 1965 to 1969, EOOW Qualified, the (EOOW) Engineering Office of the Watch is certified to manipulate the reactor controls and is a Senior Watch Officer, reporting directly to the Commanding Officer, and supervises the overall operation of the Nuclear Propulsion Plant. This qualification is normally attained only by Commissioned Officers.

May 1969 to July 1972 - United States Nuclear Propulsion Training Unit, SlC, Windsor, Connecticut - Prototype Instructor, qualified as Engineering Officer of the Watch, (EOOW), instructed officer and enlisted EOOW students in all aspects of operations associated with the nuclear propulsion plant. M. Division officer technical assistant and component evaluator: reporting directly to the material manager as well as administrative and purchasing responsibilty for the SlC Mechanical Equipment.

ROB ROY HAGGARTY MAINTENANCE SUPERINTENDENT INDIAN POINT 3 NUCLEAR POWER PLANT POWER AUTHORITY OF THE STATE OF NEW YORK

EDUCATION:

Westfield High School, Westfield, Massachusetts.
Northeastern University, Springfield, Massachusetts
Evening Division. Engineering and Business Administration
(4 1/2 years).

EXPERIENCE:

1977 to date

POWER AUTHORITY OF THE STATE OF NEW YORK Maintenance Superintendent Indian Point 3 Nuclear Power Plant

Responsible for planning and performance of plant maintenance including direction and supervision of maintenance personnel. Responsible for procedures and records related to plant maintenance. Directs activities of personnel engaged in maintenance planning and support during plant outages.

1974 to 1977

COAST TO COAST CONSTRUCTION COMPANY Field Supervisor

Maintenance and repair of power plant equipment in nuclear and fossil fuel facilities in New England area. Nuclear - Connecticut Yankee (PWR), Vermont Yankee (BWR), fossil - utilities and commercial corporations.

1973 to 1974

SAGE CORPORATION
Maintenance Superintendent

Maintenance supervisor for an apartment complex in Indian Shores, Florida.

1969 to 1972.

CONNECTICUT YANKEE ATOMIC POWER COMPANY Maintenance Foreman

Performed foreman responsibilities for maintenance activities during construction of plant, start-up, commercial operation and refueling.

1967 to 1969

CONNECTICUT YANKEE ATOMIC POWER COMPANY Maintenance Mechanic

Maintenance mechanic on reactor, nuclear steam supply, turbine, and related equipment. Performed functions of machinist, welder, mechanic and millwright.

1966 to 1967 HARTFORD SPECIAL MACHINERY COMPANY

Mechanical Assembler

Assembled special machines for Polaroid, Sylvania, Atrox, Pratt and Whitney, Hartford Special's Indexes and screw machines.

1965 to 1966 HAMILTON STANDARD

Mechanical Assembler

Assembler for electron beam welding machine.

1962 to 1965 WESTFIELD RIVER PAPER COMPANY

Mechanic Millwright

Repair and maintenance of plant equipment. Welder, machinist,

plumber, carpenter, electrician.

1946 to 1962 THE HAGGARTY'S

> Partner in structural and ornamental iron business. Includling welding, operation of various machines (lathe, miller, drillpresses, etc.), estimate take-offs, print detailing, fabrication

and erection.

1940 to 1944 SPRINGFIELD ARMORY

> Instrument repair of control and recording equipment in forge, heat-treat, plating for Foxboro, L&N, Brown, Tyalor.

DANIEL HALAMA

SITE QUALITY ASSURANCE ENGINEER
INDIAN POINT 3 NUCLEAR POWER PLANT
POWER AUTHORITY OF THE STATE OF NEW YORK

EDUCATION:

B.M.E. from The City College of New York (1969).

EXPERIENCE:

1976 to date

POWER AUTHORITY OF THE STATE OF NEW YORK

Indian Point 3 Nuclear Power Plant Site Quality Assurance Engineer

Responsible to the Director-Quality Assurance for the staffing, organization and training of the Quality Assurance staff at the Indian Point 3 Nuclear Power Plant for the eventual take over of operation and maintenance from Consolidated Edison Company.

1975-1976

Courter and Company and Lilco's Shoreham Jobsite Quality Assurance/Quality Control Supervisor

Duties included responsibility for implementing Stone and Webster's Specifications, ASME III and F.Q.C. Manual requirements into Courter and Company's work effort.

Represent Courter and Company at Exit Audit Meetings of the N.R.C., ASME III and Stone and Webster Auditing Teams.

1974-1975

Self-employed as an Engineering Consultant of Quality Compliance and Inspection

Worked as a consultant on inspection and establishment of inspection and quality compliance programs for maintenance and repair of rotating equipment, structural components and piping.

1971-1974

Ebasco Services Incorporated

Supervisor of Vendor Quality Compliance Representatives, June 1971. Supervised ten to fifteen Quality Control representatives (inspectors) located throughout the United States and foreign countries. Responsibilities included planning, scheduling and assigning work loads, preparing and updating Quality Complaince forecasts for fossil and nuclear power plants, reviewing Quality Compliance programs for safety Related Class I, equipment, auditing and inspecting equipment and components and records at vendor's shops and client's job sites.

1969-1971

Ebasco Services Incorporated Mechanical Nuclear Engineer

Originally worked as a mechanicl engineering preparing specifications, and evaluating bids on various mechanical equipment, piping and valves, for both nuclear and fossil fuel power plants. Work included design and engineering of Seabrook Nuclear Power Station Unit No. 1 and Astoria Generating Station Unit No. 6.

JOHN PHILLIP BAYNE RESIDENT MANAGER INDIAN POINT 3 NUCLEAR POWER PLANT POWER AUTHORITY OF THE STATE OF NEW YORK

EDUCATION:

Graduated with distinction U. S. Naval Academy, 1954

Completed one year of nuclear power training April 1960. Designated as qualified for duty in connection with supervision, operation and maintenance of naval nuclear propulsion plants.

Completed three month advanced training in the S3G Nuclear Power Plant in preparation to be Commanding Officer of a Submarine.

Graduated with distinction, U. S. Naval War College, 1966.

Master's Degree, International Affairs, George Washington University, 1966.

EXPERIENCE:

1976 to date

POWER AUTHORITY OF THE STATE OF NEW YORK
Resident Manager, Indian Point 3 Nuclear Power Plant

Complete responsibility for the assumption of plant operation and administration from Consolidated Edison Company. Directed and developed policies for staffing, training, security, regulatory affairs, and spare parts. Responsible for takeover planning, budget management and implementation of the Quality Assurance Program. Represented the Power Authority of the State of New York as a member of the Consolidated Edison Company's offsite review committee. Chairman of the Plant Operating Review Committee and a member of the Site Review Committee for the Power Authority of the State of New York.

1975 - 1976

UNITED STATES NAVY

Head of the Plans and Requirements Branch of the Attack Submarine Division of the Office of the Chief of Naval Operations.

Served as a principal advisor to the Director of the Division on matters of long range planning and future requirements.

1973 - 1975 UNITED STATES NAVY

Commanding Officer of a nuclear submarine tender.

Responsible for the management, administration,
training and budgeting for an activity which conducted maintenance and logistic support for ten
modern nuclear submarines and one submarine rescue
vessel. Logistic support included repairs, radiation
monitoring and Quality Assurance for the Nuclear Power
Plants and handling of solid and liquid waste for
tended submarines.

1972 - 1973 UNITED STATES NAVY

<u>Submarine Division Commander</u> - Responsible for the operational planning and training of three modern nuclear attack submarines and one rescue vessel.

1969 - 1972 UNITED STATES NAVY

Commanding Officer - Responsible for the management, administration, planning, training and budgeting for a modern nuclear attack submarine. The Senior Officer on board responsible for the supervision, operation and maintenance of the ship's nuclear power plant.

1966 - 1969 UNITED STATES NAVY

Commanding Officer of one of Admiral Rickover's nuclear power schools, was responsible for the administration and training of 250 officers and 1200 enlisted personnel in basic and advanced science, reactor plant engineering and associated subjects. Directly responsible for a reduction in student disenvollment rate from 26 to 12 per cent.

1965 - 1966 UNITED STATES NAVY

Attended U. S. Naval War College

1963 - 1966 UNITED STATES NAVY

Executive Officer responsible for administration of personnel and training for a modern nuclear attack submarine.

1960 - 1963 UNITED STATES NAVY

Division Officer and Engineering Officer of the Watch on a new construction Ballistic Missile Nuclear Submarine. As an Engineering Officer of the Watch and Division Officer during Construction was responsible for running the start-up program for a S5W Reactor including training the personnel and writing the test program, operating procedures and administrative procedures. Upon completion of the test program, remained for two years as senior person on a shift responsible for the operation and maintenance of the nuclear power plant. Passed the required examination to be designated "Qualified Engineer of a 55W Nuclear Power Plant."

1948 - 1960 UNITED STATES NAVY

Enlisted in the Navy. Won a fleet appointment to the U. S. Naval Academy and was graduated and commissioned an Ensign. Served in numerous positions gaining the training and maturity necessary to become a Division Officer and Engineering Officer of the Watch aboard a Submarine equipped with Nuclear Propulsion.

ATTACHMENT II

Answers to

Inquiries Made During Meeting of June 17, 1977

Indian Point 3 Nuclear Power Plant
 Docket No. 50-286
 July , 1977

Generate list of shared facilities

Response

A detailed list of memoranda of understanding covering all the shared facilities is attached.

MEMORANDA OF UNDERSTANDING

NUMBER .	<u>TITLE</u> <u>I</u>	REVISION
1	Rules Governing the Use of Electrical Supplies and Interties Between Consolidated Edison and the Power Authority	0
2	Rules Governing the Use of Roads and Parking Facilities on the Indian Point Site	0
3	Rules Governing the Use of the Station Air Intertie Between Consolidated Edison and the Power Authority	0
4	Rules Governing the Use of the Demineralized Water, Condensate Makeup and Hydrogen Interties Between Consolidated Edison and the Power Authority	, 0
5	Rules Governing the Use of the Common Discharge Canal, Outfall Structure and Associated Instru- mentation and Sampling Systems	0
6	Rules Governing the Use of the City Water and Fire Protection Interties between Consolidated Edison and the Power Authority	0
7	Rules Governing the Maintenance and Use of a Dedicated (by Consolidated Edison for the Power Authority) Diesel Fuel Oil (No. 2) Supply	0
8	Rules Governing the Operation and Maintenance of the Common Sewage Treatment Facility	0
9	Rules Governing the Supply of Chlorine by Consolidated Edison to the Power Authority	0
10	Rules Governing the Supply of Carbon Dioxide by Consolidated Edison to the Power Authority	0
11	Rules Governing the Operation of the Auxiliary Steam System, Including Condensate Return and Desuperheating Water, Intertie between Consolidated Edison and the Power Authority	0
12	Rules Governing Transmittal of Operating Informatio Between Consolidated Edison and the Power Authority	

NUMBER	TITLE	EVISION
13	Rules Governing the Maintenance of the Meteor- ological Tower for Joint Use by Consolidated Edison and the Power Authority	0
14	Rules Governing the Supply of Service Boiler Fuel Oil (No. 6) to the Power Authority by Consolidated Edison	0
15	Rules Governing the Receipt, Processing and Dis- charge of Liquid Waste by Consolidated Edison and the Power Authority	0
16	Rules Governing the Receipt, Processing and Dis- charge of Gaseous Waste by Consolidated Edison and the Power Authority	0
17	Rules Governing Action to be Taken by Consolidated Edison and Power Authority Personnel in the Event a Site Limit or Authorized Portion thereof is exceeded	
18	Rules Governing the Use of Consolidated Edison's Maintenance Facilities and Equipment Located at Indian Point by Power Authority Personnel	0
19	Rules Governing the Use of Consolidated Edison Spare Parts by Power Authority Personnel	0
20	Rules Governing Work on Equipment which Requires the Application of Personnel Protection by both Consolidated Edison and the Power Authority	0
21-	Rules Governing Access Control Between Consolidated Edison and Power Authority Protected (Security) Areas	0
22	Rules Governing the Provision of Supplemental Personnel on an "on-loan" Basis to the Power Authority by Consolidated Edison	0
23	Rules Governing the Use Of Consolidated Edison's Health Physics Facilities and Equipment Located at Indian Point by Power Authority Personnel	0
24	Rules Governing the Transfer of Indian Point Unit 3 Plant Records from Consolidated Edison to the Power Authority	0 .
25	Rules Governing Consolidated Edison's Provision of Analytical Services to the Power Authority	0

NUMBER	 TITLE	REVISION
26	Rules Governing the Use of Consolidated Edison's Chemistry Facilities and Equipment Located at Indian Point by Power Authority Personnel	0
27	Rules Governing the Control of Total Site Electrical Output when Conditions Impacting on the Site Output are Common to both Consolidated Edison and the Power Authority	o .
28	Rules Governing the Implementation of the Emergency Plan at the Indian Point Site	0
29	Rules Governing the Use of Consolidated Edison's I & C Facilities and Equipment Located at Indian Point by Power Authority Personnel	0
30	Rules Governing Consolidated Edison's Provision of Environmental Monitoring Services to the Power Authority	0
31	Rules Governing the Apportionment of the Fish Impingement Limits of the Environmental Technical Specifications and Actions to be Taken in the Event these Limits are Exceeded	0
32	Rules Governing Termination of Memorandums of Understanding Between Consolidated Edison and the Power Authority	0
33	Rules Governing Costs Determination and Payments for Services Provided as a Result of the Memo- randums of Understanding between Consolidated Edison and the Power Authority	0.

Identify the manner in which the control of shared facilities will be handled in the IP3NPP Environmental Technical Specification.

Response

Upon review by the Commission of the list of agreements covering the shared facilities, the Power Authority will provide details of those agreements in which the Commission is specifically interested.

Preparation of Emergency Plan in conformance to USNRC Regulatory Guide 1.101.

Response

The Emergency Plan forwarded to the NRC as part of the Authority's submittal necessary for assuming sole license responsibility of the IP 3 is essentially the <u>CON EDISON INDIAN POINT 3 NUCLEAR POWER</u>

<u>PLANT SITE EMERGENCY PLAN AND PROCEDURES.</u> This joint plan has been submitted to, and approved by, the NRC.

The Authority's Emergency Plan entitled, <u>INDIAN POINT 3 NUCLEAR</u>

<u>POWER PLANT EMERGENCY PLAN</u>, incorporates textual changes to the

extent necessary to provide for differences between Consolidated

Edison Company of New York, Inc. (Con Ed) and the Power Authority

of the State of New York (Authority). The Implementing Procedures

Section of the IP 3 Emergency Plan named "Emergency Procedures

Document," is maintained at the IP 3 site.

The Emergency Plan is a living document and, as such, will be updated periodically to ensure that it remains an effective vehicle for mitigating the consequences of an accident.

The Authority will provide the Commission with an Emergency Plan for the IP 3 site which more closely follows the format expressed in Reg. Guide 1.101, at such time when the NRC requires, in Section D of that guide: "Implementation," that the nuclear industry backfit previously accepted Emergency Plans to meet the criteria set forth in Reg. Guide 1.101 "Emergency Planning for Nuclear Power Plant." Revision 1, March 1977.

Training Considerations

Response

We have attached revised pages of Section 13 on the training program, of the Application. Following approval by the Commission of this submittal, the final version of Section 13 will be made available for insertion into our original application.

13.2 TRAINING

13.2.1 REPLACEMENT AND RETRAINING

13.2.1 Licensed Operators - Requalification Training

Licensed Operating and Supervisory personnel have been trained under Con Ed training programs. The replacement and retraining programs were established in compliance with 10CFR50.54 (i-1) and were designed to meet the requirements of Appendix A, 10CFR55. The Authority will continue to meet said requirements.

1. SCHEDULE

The requalification program shall not exceed periods of two years in length. Successive requalification programs using the same format shall follow the first in a continuous cycle not exceeding two years in length.

2. LECTURES

Preplanned lectures on a regular and continuing basis spanning the requalification program will be provided by the plant staff or others suitably qualified on the following subjects:

- (a) Theory and principles of operation
- (b) General specific plant operating characteristics
- (c) Plant instrumentation and control system
- (d) Plant protection systems
- (e) Engineered safety systems
- (f) Normal, abnormal, emergency and special operating procedures
- (g) Radiation control, safety and radiation protection procedures
- (h) Technical specifications
- (i) Applicable portions of Title 10 CFR
- (j) Quality assurance for operations
- (k) Changes in equipment and operating procedures
- (1) Facility design and license changes
- (m) Emergency Plan and procedures
- (n) Fuel handling equipment and techniques

Films, video tapes and other effective training aids may be used to supplement lectures. The use of these devices shall not exceed approximately 50% of the lecture series.

3. ON-THE-JOB TRAINING

Each licensed Reactor Operator shall manipulate and each licensed Senior Reactor Operator shall either manipulate or supervise the manipulation of the controls of the reactor or a simulator that reproduces the general operating characteristics of the reactor during 10 reactivity changes during the term of their license. These manipulations shall involve a variety of the evolutions listed below:

(a) Startup to the point of adding heat

(b) Orderly shutdown

- (c) Manual control of S.G.'s during startup and shutdown
- (d) Operation of Turbine Generator in manual during startup

(e) Boration during power operation

(f) Dilution

(g) Operation of manipulator crane during refueling over the core

(h) Control manipulation during significant
 (> 10%) power changes

(i) Manual rod control prior to and during generator synchronization.

A simulator having the general operating characteristics of the facility may be used to demonstrate that the operator understands the operation of the equipment and systems under normal, abnormal and emergency conditions. When a simulator is used, operations shall be conducted with Indian Point 3 procedure when appropriate and applicable.

4. INDIVIDUAL STUDY

Reading assignments shall be periodically made for operators and senior operators to be completed while on shift. Oral and/or written quizzes may be given to evaluate the knowledge level of the operators in these areas. The subjects covered shall include but need not necessarily be limited to the following areas:

- (a) Facility Design Changes
 - (b) Procedure Changes
 - (c) Facility License Changes

(d) Operating Procedures

- (e) Special Procedures, including simulation whenever possible
- (f) Emergency Plan and Procedures
- (g) Radiation Protection Procedures

5. EVALUATION

An annual written examination for the unit shall be given to determine the effectiveness of the retraining program, individual knowledge level, and to identify areas that require emphasis in future lectures. The examination shall normally be given in four parts of about two hours each (total eight hours). Each part will be given at appropriate times throughout the year and will include

two or three sections. These sections will correspond to the lecture topics. The scope of the annual examination shall be broad and not limited to just the material presented in the retraining lectures.

Operators scoring above 80% in all sections of the annual examination shall not be required to attend further requalification lectures. Operators attaining 80% or above on some topics but below 80% on others shall be required to attend review lectures only on those below 80%.

An overall grade of 70% is considered passing. Should an individual fail to attain 70%, he will be given an oral examination within two weeks by the Operations Superintendent and Training Coordinator to determine his competency with respect to continuing to operate. Regardless of their decision, he will be given additional training in the indicated areas of weakness and a follow-up examination shall be administered within five weeks of his failure to attain a passing grade on the annual examination.

Operators who score less than 70% on the follow-up examination shall be placed in an accelerated requalification program. Individual programs shall be tailored to place emphasis where required.

Exact scope and duration shall be determined by a review team consisting of the Superintendent of Power, Operation Superintendent, and Training Coordinator. Individuals participating in the accelerated requalification program shall be removed from regular shift duties.

Emergency and abnormal conditions response will be demon-strated by the use of a simulator or in the control room. When the control room is used the actions and control device to be operated during Emergency and abnormal conditions shall be discussed. Manipulation of the panel will not be required. Evaluation shall be accomplished by the Training Coordinator, his assistant, or other designated qualified supervisors, and recorded.

The Training Coordinator shall periodically review each Licensed Operator's and Senior Reactor Operator's file and schedule evolutions, lectures and other training functions so as to keep each individual's retraining current.

Written quizzes shall be administered following each required attendance requalification lecture or series of lectures on a given topic. In addition, written quizzes may periodically be administered to determine the operator's knowledge of material covered in specific reading assignments or walk-thru exercises. These quizzes shall be graded and their results placed

in the individual training files. A passing grade for these quizzes is 80%. An operator or senior operator scoring below 80% shall be required to repeat the specific lecture or reading assignment covered by the quiz.

If a licensed individual prepares and grades the annual examination, he or she need not take the examination. This exclusion shall extend to two individuals.

13.2.2 REFRESHER TRAINING FOR UNLICENSED PERSONNEL

| Retraining shall be provided for personnel not requiring NRC licenses such as supervisors, professionals, non-licensed operators, technicians and maintenance personnel.

1. GENERAL RETRAINING

- (a) At least once a year all personnel shall review applicable portions of the administrative controls and procedures affecting organization, responsibilities, security, access control, rules for visitors, contractors and temporary personnel and other related subjects.
- (b) Review sessions on Radiation Protection and Radiation Safety shll be conducted at least annually. These shall include methods of keeping exposure to a minimum, and use of protective equipment including breathing apparatus and clothing.
- (c) The Security Plan and Implementing Procedures shall be reviewed with those personnel responsible for its implementation on an annual basis.
- (d) Review sessions on the Emergency Plan and Procedures shall be held on an annual basis. This shall include but not be limited to the various orders of radiation emergencies including evacuation and fire.

2. NON-LICENSED OPERATORS

Nuclear Plant Operators do not require an NRC Operators License. However, these operators must maintain a high degree of proficiency for safe plant operation. They shall have and maintain the basic qualifications and training such that when required, they may readily enter the operators training course and obtain a license.

(a) They may be scheduled for selected lectures in the licensed operator requalification program. They will not be required to maintain the same certification standards.

Periodic "Walk through" simulating normal and abnormal operating conditions will be given by the Shift Supervisor and/or the Training Coordinator. Operators will be evaluated on their responses and results will be recorded in their training files.

3. TECHNICIANS

In addition to the General Retraining Program, all technicians shall receive refresher training in their particular area of expertise. Supervisors of each applicable department, along with the Training Coordinator will design the retraining program according to the needs indicated by observation, performance or increased scope of work. Retraining may be provided by lectures, demonstrations, or "one-on-one" application. Training records shall reflect the extent of retraining.

4. MAINTENANCE PERSONNEL

In addition to the General Retraining Program, maintenance personnel shall be provided with refresher seminars as the Maintenance Superintendent deems necessary through observation, performance or increased work scope. This may be provided by informal group discussion, lectures, or observation of individuals performance with follow-up critique on specific assignments. Training records shall reflect the individuals extent of retraining.

5. PROFESSIONAL AND SUPERVISORY

The Training Coordinator shall maintain an up-to-date resume of all educational and retraining activities engaged in by each non-licensed Technical, Professional or Supervisory employee. The Resident Manager with the assistance of the Training Coordinator shall from time to time schedule retraining activities for this group as necessary to maintain their technical competence. These may include lectures, seminar-type discussion sessions, formal outside academic courses, participation on professional committees or assignment to other reactors, simulators or manufacturer facilities. This group will also participate in the General Retraining Program.

13.2.2.3 REPLACEMENT TRAINING

The general philosophy for Replacement Personnel Training involves upgrading from within the ranks to fill vacancies in the station staff and to ensure a sufficient reserve of qualified individuals.

All new employees shall receive indoctrination in radiation safety, emergency plan, security, quality assurance, industrial safety, and job functions.

Most new employees will be assigned to a starting job in a specific department of the plant. The method of training will be determined according to the type of work to be performed. They will be conducted on walk-throughs in their work area, simulating normal and abnormal conditions, and given hands-on training on a one-on-one basis during regular shift operations. Tutoring type explanations of the systems they work on will be provided for a single individual entering employment while class instruction will be available should individuals enter

at nearly identical times. When it is necessary or desirable to Ticense additional operators, they shall be provided with training closely paralleling the curriculum in the original program, adjusted for their current training, qualifications and experience.

Technicians and maintenance personnel, in addition to receiving new employees' general training, will receive personal attention in explanation of job evolutions either by the supervisor of the group or designated experienced lead person with hands-on, on-the-job type participation.

Persons entering employment in professional or supervisory categories shall be provided with indoctrination training commensurate with their experience and academic background at the discretion of the Resident Manager.

In general, the training and evaluation of replacement personnel will closely follow that of the original programs adjusted for personal experience, background and availability and accessability of equipment in an operating plant. The scope and training that an individual with prior experience will be required to take will be determined on a case-by-case basis, depending upon the Resident Manager's evaluation of the individual's qualifications.

13.3 EMERGENCY PLANNING

The IP3NPP Site Emergency Plan is submitted as a physically separate document and describes the Authority's plans for coping with emergencies pursuant to 10CFR50.34 (a) (10) and (b) (6) (v) of 10CFR50, Appendix E. The Emergency Plan describes appropriate portions of 10CFR50, Appendix E. Con Ed presently has an Emergency Plan for the site.

13.4.1 ON-SITE REVIEW

Each major department supervisor reviews, by timely examination of logs and charts, the performance of personnel and equipment for which he is responsible. Engineers and Technicians periodically conduct tests on equipment and systems and evaluate present conditions with respect to previous operating paramenters.